

Appln. No. 10/520,008
Amd. dated September 4, 2007
Reply to Office Action of June 6, 2007

Amendments to the Claims

This listing of claims will replace all prior versions,
and listings of claims in the application:

Listing of Claims:

Claims 1 and 2 (Cancelled).

3 (Currently amended). The method according to claim 2
18, wherein the binding motif sequence for a protein having a
nuclear transport signal is a binding motif sequence for a
transcription factor.

4 (Currently amended). The method according to claim 4
18, wherein the DNA ~~having an inverted repeat sequence~~ has a
modified nucleotide, wherein the modified nucleotide is selected
from the group consisting of a methylated ribonucleotide, a
sulfurized deoxyribonucleotide and an LNA.

5 (Currently amended). The method according to claim 4
18, wherein the DNA ~~having an inverted repeat sequence~~ is a
double-stranded DNA.

6 (Currently amended). The method according to claim 4
18, wherein the DNA ~~having an inverted repeat sequence~~ is a
single-stranded DNA.

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7 (Currently amended). The method according to claim +
18, wherein the target nucleic acid is a nucleic acid located in
cytoplasm.

8 (Currently amended). The method according to claim +
18, wherein the target nucleic acid is a nucleic acid located in
nucleus.

9 (Currently amended). The method according to claim +
18, wherein a plurality of mutations are simultaneously
introduced into the target nucleic acid.

10 (Currently amended). The method according to claim +
18, wherein the mutation to be introduced into the target nucleic
acid is substitution, deletion and/or insertion of a nucleotide.

Claims 11-16 (Cancelled).

17 (New). A method for introducing a mutation into a
nucleotide sequence of a target nucleic acid, comprising:

(1) preparing a DNA which consists of
an inverted repeat sequence consisting of a sense
strand sequence and an antisense strand sequence of a target
nucleic acid and containing a mutation to be introduced into the
target nucleic acid, wherein the sense strand sequence and the
antisense strand sequence are arranged in tandem, and the
mutation to be introduced into the target nucleic acid is located

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within the sense strand sequence and the antisense strand sequence in the inverted repeat sequence, and wherein a spacer may optionally be inserted between the sense strand sequence and the antisense strand sequence; and

(2) transferring the DNA prepared in step (1) into a cell.

18 (New). A method for introducing a mutation into a nucleotide sequence of a target nucleic acid, comprising:

(1) preparing a DNA which consists of:

an inverted repeat sequence consisting of a sense strand sequence and an antisense strand sequence of a target nucleic acid and containing a mutation to be introduced into the target nucleic acid, wherein the sense strand sequence and the antisense strand sequence are arranged in tandem, and the mutation to be introduced into the target nucleic acid is located within the sense strand sequence and the antisense strand sequence in the inverted repeat sequence, and wherein a spacer may optionally be inserted between the sense strand sequence and the antisense strand sequence, and

a binding motif sequence for a protein having a nuclear transport signal; and

(2) transferring the DNA prepared in step (1) into a cell.

19 (New). The method according to claim 18, wherein said DNA is prepared by excising the inverted repeat sequence from a plasmid containing said inverted repeat sequence as an insert, utilizing sites for restriction enzyme(s) at both ends of the insert in the plasmid.

20 (New). The method according to claim 18, wherein said DNA is prepared by PCR using as a template a plasmid containing said inverted repeat sequence.

21 (New). The method according to claim 17, wherein the DNA has a modified nucleotide, wherein the modified nucleotide is selected from the group consisting of a methylated ribonucleotide, a sulfurized deoxyribonucleotide and an LNA.

22 (New). The method according to claim 17, wherein the DNA is a double-stranded DNA.

23 (New). The method according to claim 17, wherein the DNA is a single-stranded DNA.

24 (New). The method according to claim 17, wherein the target nucleic acid is a nucleic acid located in cytoplasm.

25 (New). The method according to claim 17, wherein the target nucleic acid is a nucleic acid located in nucleus.

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26 (New). The method according to claim 17, wherein a plurality of mutations are simultaneously introduced into the target nucleic acid.

27 (New). The method according to claim 17, wherein the mutation to be introduced into the target nucleic acid is substitution, deletion and/or insertion of a nucleotide.